

# FEATURE

*A monthly features service on scientific, technical, and educational subjects pertinent to development.*

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## WHAT PRICE CLEAN WATER?

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If the target of the International Drinking Water Supply and Sanitation Decade--clean water and sanitation for all by 1990--is to be met, nearly half a million additional people will have to be served with new water supplies and sanitation facilities every day for the next ten years.

This is a gigantic task but it nonetheless needs to be done. We live in a world that has made dramatic advances in science and technology. Yet it is a matter of daily shame that millions of women and children still have to walk several kilometres every day in search of such a basic necessity of life as water. Around 25,000 people die every day because of the lack of clean drinking water. If health is a human right, then easy access to clean water is automatically a paramount human right.

It is extremely difficult to estimate what the Decade will cost. The costs of water supply and sanitation systems can vary enormously, depending on the physical conditions and the geographical location of the project, on the level of services that are to be provided, and on the extent of the coverage intended.

If water and sanitation planners were to aim at a level of service that they have conventionally planned for--every urban household connected to a sewerage system and possessing a water tap of its own, and all rural households provided with standpipes or handpumps and individual latrines--the total costs could, according to one estimate, be as high as US \$600,000 million.

But by using a wider mix of service levels and cheaper and more appropriate technologies, in both rural and urban areas, the costs could

could be cut to between one-half and one-third that amount--or even less. This would still mean that at least \$20,000 to \$30,000 million will be needed every year. Since it is so important to keep funding requirements to a minimum, attitudes towards technology will clearly play a very important role. Technical interest must move away from urban sewers and multiple tap connections, which is where an overwhelming proportion of current investment is concentrated, to focus instead on the priority needs of the unserved poor, the principal target group of the Decade.

In 1979, some \$8,000 to \$10,000 million are estimated to have been invested in the water supply and sanitation sector. External bilateral and multilateral agencies contributed nearly \$2,500 million. The rest was spent by developing countries themselves from their own domestic resources. If it is assumed that a third of the total resources required during the Decade will have to be raised through international support, then the external agencies will have to collectively raise at least \$6,000 to \$7,000 million every year, equivalent to a three-fold increase in their current contributions.

This sum may look large but it was still less than the developed countries paid out in military expenditure every two weeks in 1979. It is also a small fraction of what the world spends annually on alcoholic beverages. The world literally sends up in smoke more than ten times this amount every year in the form of cigarettes. North American and European consumers alone spend more than half of the amount annually required as the external contribution to the Decade on tranquillizers, which are for the most part being used for totally non-essential purposes.

If less were spent on products of death, unhealthy habits and self-indulgence, everyone in the world could easily be provided with the basic sources of a healthy life: clean water and sanitation.

There is plenty of scope for improving external support. The Decade provides a worthwhile opportunity for those countries whose aid contributions remain below the UN target of 0.7 percent of GNP to increase their commitments. The recent report of the Brandt Commission has called for the goals of the Decade to be fully supported. The contributions of Member States of OPEC (the Organization of Petroleum Exporting Countries) towards this sector have also been low. Increased support from such bilateral sources is important because, without it, it may not even be possible to maintain the current rate of growth of investment in the sector.

Some agencies have indicated that they will increase their support for

the Decade. But whether these extra funds would be additional to existing aid funds or merely generated by shifting support from one sector to another is not yet clear. For those countries suffering from serious economic problems and low growth rates, it would mean posing a cruel dilemma, were they to be asked to choose whether they want external support for investment programmes aimed at increasing national production, or social programmes aimed at meeting vital basic needs.

Another problem is that of the tied character of aid. Some donor countries continue to enforce strict regulations about the purchase of equipment and consultancy services; others, such as the Federal Republic of Germany and Sweden, have relaxed their tied aid regulations for water supply and sanitation programmes. Because of today's difficult economic situation, some countries are now under pressure to tighten up their aid regulations again. This would be unfortunate for the Decade. Many instances of the use of inappropriate technologies in the past, resulting in extraordinarily high breakdown rates of equipment, have been traced to the regulations that enforced tied aid, since inappropriate equipment that could not be maintained locally had to be imported.

The only way investment costs in this sector can be kept low and manageable is by using cheap, simple and effective technologies, calling for local manufacture based on local materials and skills.

A strong commitment to the Decade on the part of governments of developing countries is even more vital, since ultimately it will be they who have to raise the overwhelming part of the funds required from their own domestic resources. Trying to meet the Decade target could mean some important shifts in current budgetary allocations from one sector to another, and also within the sector--for instance, from urban to rural areas and from a higher level of services that benefit only a few to a lower level of services that can reach the majority.

An acceleration of the water supply and sanitation programmes can be achieved only through concerted efforts by developing countries to ensure better coordination between the plethora of domestic agencies that currently deal with the sector, to prepare national plans, and to launch national training programmes for professional, technical, and community-level workers. At least one million new technical and professional cadres will have to be trained during the Decade. The lack of good maintenance institutions and of properly trained manpower is leading in some countries to a situation where more existing systems are breaching down or falling

into disuse than new systems are being built.

Because of all these considerations, the primary commitment and decision to emphasize the provision of basic needs like water and sanitation will have to come from the governments of developing countries themselves.

In the initial phases of the Decade, helping these governments to create a domestic capability to plan their programmes for water supply and sanitation and execute them efficiently is going to be an even more important area for international cooperation than providing funds for projects. The World Health Organization and the World Bank have for several years had a cooperative programme under which information on the state of the water supply and sanitation sector has been collected from more than 100 developing countries. The World Bank and the International Development Research Centre of Canada have been actively engaged in identifying and assessing low-cost sanitation technologies for both urban and rural areas. Collection and transfer of information, training of manpower, building up of institutions, development of operational and maintenance capabilities--these are all crucial areas for international cooperation, and it is the progress made in these areas that will determine the pace with which projects are ultimately implemented.

Most important of all is community involvement. Communities can contribute and participate in the construction of systems that are intended to serve them, and they can play an important role in operating, maintaining and managing them. Members of the communities can also teach each other the importance of clean water and sanitation. Community support thus has an enormous and as yet untapped potential to replace paper money with real action.

It would probably not be wrong to say that the central goal of this Decade is to spread this philosophy: to make water and sanitation planners accept that their success will depend on how much they can mobilize and involve the people.

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